Michigan Department of Community Health
Radiation Safety Section
Website: www.michigan.gov/rss

GONAD SHADOW SHIELDING

This is one example for the design of gonad shielding. Many different designs of shadow shields are also commercially available. It is called shadow shielding because the area to be shielded is in the shadow of lead pieces attached to the collimator. The shadow is caused by the shield being in the path of the x-ray beam and the coincident collimator light, which is used to align the x-ray beam. Some users have found this method of shielding to be the most useful since it is very flexible and, for the patient, unobtrusive.

Two long velcro strips are attached to pieces of lead which are typically larger than a quarter. Any method could be used to attach the velcro to the lead pieces, even tape. Many x-ray facilities use oval shapes for the lead. Two shorter velcro strips are attached to the collimator. The velcro strips on the pieces of lead attach to the velcro strips on the collimator. The long strips on the lead allow for adjustments in one direction; the strips on the collimator allow for adjustments in the other direction. Only one shield is needed for male patients.